Docket No. 00884.088US1 *WD* # 362455



## **Clean Version of Pending Claims**

EASY MOUNT SOCKET Applicant: Kenzo Ishida, et al. Serial No.: 09/217,401

1. A mounting socket, comprising:

a socket body having a first side and a second opposite side, the body having a plurality of vias extending therethrough; and

a plurality of conductive terminals within the vias, wherein the terminals are adapted to be elastically compressible and exert a return force when compressed, the terminals comprising a coil and a conductive polymer.

- 4. The mounting socket of claim 1, wherein the conductive polymer is injected within the vias.
- 5. The mounting socket of claim 1, and further comprising: a first adhesive layer affixed to the first side of the body.
- 6. The mounting socket of claim 5, and further comprising:

  a polymer tape applied to the first adhesive layer;

  a ground and power line circuit laid on the polymer tape; and
  a second adhesive layer applied on and protecting the ground and power line circuit.
- 7. The mounting socket of claim 5, and further comprising: a second adhesive layer affixed to the second side of the body.
- 9. A method of mounting a socket to a board, the socket having a plurality of elastically compressible conductive terminals, comprising:

applying an adhesive layer to a board side of the socket; leveling the adhesive layer to make the adhesive layer substantially coplanar with the terminals of the socket; and

adhering the socket to the board compressing the plurality of terminals against complementary electrical contacts on the board, the terminals comprising a coil and a conductive polymer, the terminals adapted to exert a return force when compressed.

10. The method of claim 9, and further comprising:

applying a second adhesive layer to a package side of the socket opposite the board side of the socket; and

adhering a package to the second adhesive layer.

11. A method of mounting a package to a board using a socket having elastically compressible conductive terminals, the terminals comprising a coil and a conductive polymer, the terminals adapted to exert a return force when compressed, the method comprising:

applying a first adhesive layer to a first package side of the socket;

leveling the first adhesive layer to make the adhesive layer substantially coplanar with the terminals;

adhering the package to the first adhesive layer compressing the terminals against complementary electrical contacts on the board, the terminals exerting a return force;

applying a second adhesive layer to a second board side of the socket;

leveling the second adhesive layer to make the second adhesive layer substantially coplanar with the terminals; and

adhering the board to the second adhesive layer compressing the terminals against complementary electrical contacts on the board, the terminals exerting a return force.

12. A circuit interconnect, comprising:

a circuit board carrier having a plurality of through holes formed therein; and a plurality of elastically compressible conductive terminals with lands at each end, each terminal disposed in one of the through holes, wherein the terminals are adapted to be elastically

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compressible and exert a return force when compressed, each terminal comprising a coil and a conductive polymer.

- 13. The circuit interconnect of claim 12, and further comprising:
- a first adhesive layer affixed to a first side of the circuit board carrier, the first layer having openings to expose the lands.
- 14. The circuit interconnect of claim 13, and further comprising:
  a second adhesive layer affixed to a second side of the circuit board carrier, the second layer having openings to expose the lands, the second side opposite the first side.
- 17. The circuit interconnect of claim 12, wherein the conductive polymer is injected within the vias.
- 18. A circuit package, comprising:

the first side.

- a substrate having a plurality of conductive terminals therethrough, the terminals comprising a coil and a conductive polymer, the terminals adapted to be elastically compressible and to exert a return force when compressed;
  - a first adhesive layer affixed to a first side of the substrate; and a package affixed to the first adhesive layer.
- 19. The circuit package of claim 18, and further comprising:
  a second adhesive layer affixed to a second side of the substrate, the second side opposite
- 20. An integrated circuit, comprising:a substrate having a plurality of vias therein; anda plurality of elastically compressible terminals, the terminals comprising a coil and a

conductive polymer, the terminals adapted to exert a return force when compressed, each terminal positioned in a via.

## 21. A circuit assembly, comprising:

a substrate having a built-in socket, the socket having a plurality of vias therein;

a plurality of elastically compressible conductive terminals, the terminals comprising a coil and a conductive polymer, the terminals adapted to exert a return force when compressed, each terminal disposed within a via; and

a circuit board having a plurality of mounting areas, the mounting areas disposed in a plurality of interconnected planes which are substantially non-planar with each other,

wherein each terminal is individually compressible to contact its respective mounting area at the plane of the mounting area.

## 22. A circuit assembly, comprising:

a microprocessor;

a substrate having a built-in socket having a plurality of vias therein, and a plurality of conductive elastically compressible terminals, the terminals are adapted to exert a return force when compressed, the terminals comprising a coil and a conductive polymer, at least a portion of each terminal disposed within a via; and

a motherboard having a plurality of mounting areas thereon, each terminal compressed to contact a mounting area.

- 23. The mounting socket of claim 1, wherein the terminals are adapted to accommodate for an uneven or warped substrate upon which the mounting socket is disposed.
- 24. The mounting socket of claim 1, wherein the terminals are solderless.